## THE ACADEMY MEETS THE CHALLENGE OF THE FUTURE\*

## ARTHUR FREEBORN CHACE

President of The New York Academy of Medicine

## Inaugural Address

have considered it an honor to give all his time for two terms to this noble institution, after having devoted years to the advancement of its work. This, Malcolm Good-ridge has done and tonight he ends four years as President of the Academy.

Fortunately for us, it is not an ending but a continuation, for we feel sure that Dr. Goodridge will always share with us our responsibilities and give to us the accumulated wisdom gained during a lifelong service to the Academy, a service which so eminently fitted him for the years as our President.

During this time he has devoted all of his strength and energies to the solving of the many difficult problems which have confronted us. His patient attention to detail, his never-failing faith in the ability of the Academy to meet its ever-increasing burdens, his unselfish devotion and wise leadership will always be an inspiration to those who follow him.

One cannot contemplate the future either as it may affect the life of an individual or that of an institution without being acutely aware of the great emergency which confronts us individually and collectively. From whatever vantage point we survey the effects of the great storm now sweeping the world we cannot escape the whisperings of anxiety nor deny the imminence of danger. Civilization, even all that the Academy holds most valuable, is threatened with well-organized destruction by men who have wilfully and purposely reverted to barbarism.

<sup>\*</sup> Delivered January 7, 1943 at the Annual Meeting of The New York Academy of Medicine.

In Paris, Louvain, Warsaw and in London, libraries have been pillaged or lie in ruins. Books, the very lighthouses of our profession, by which we can steer our course true into the future, have been piled in heaps and burned. In Europe the free interchange of ideas and discoveries, through which science has grown great, is no longer possible.

We cannot hope to penetrate even lightly the mist of the future without casting upon it that illumination which can be gained through the contemplation of the past and the present in historical perspective. The New York Academy of Medicine is now in its 96th year. During these years it has confronted and surmounted many crises. It has shared in the destinies of our people and our country and has, through its constructive work, helped to shape the issues of the years.

The Academy not only survived the internecine strife of the Civil War which broke out shortly after its creation; the trials of the long Reconstruction period and the ordeals of the last World War, but has emerged from these tests richer by the experience and stronger by the trials. This was possible because of the far-seeing wisdom of its leaders and the faith of its fellowship. Both recognized that virile life ever necessitates, as Herbert Spencer so aptly phrased it, the adjustment of inner relations to outer circumstances, The Academy has never wavered in its devotion to its objectives which were the reasons for its creation; to foster the science of medicine and to maintain the highest ideals in its practice. Wisely, however, the ways in which the Academy has pursued these objectives have changed with time. They have grown in scope and in complexity even as did our science and our social and economic existence.

The Academy has undergone a series of revolutionary progressions. In the earliest years of its existence, it was chiefly devoted to the collection of a library where men might read and learn. Then, as the need for discussion in common impressed itself upon the fellowship, there developed a strong drive for the procurement of a permanent home for the Academy. Still later, and that brings us down to the beginning of the present century, as our community grew in complexity and as our science developed infinitely, it became evident that precious as was our library and useful our meeting halls, they could not serve to fulfill the growing obligations of medicine to society. In that way, thirty-one years ago, there came into being the Public Health Relations Committee, eighteen years ago the Committee on Medical Education, and more

recently the Committee on Medical Information.

These developments and achievements so briefly summarized, were not realized without great effort nor without contest even in our own fellowship; "the adjustment of their inner relations to outer circumstances" is never an easy accomplishment. Yet that they were achieved is witnessed in our history and with what profound benefit to the medical profession and to the public, is attested by all. The Academy will continue to collect, preserve, distribute, and advance all that is best in medical skill. For, in the words of Hippocrates, familiar to you all: "The physician must know what his predecessors have known, if he does not wish to deceive both himself and others."

What is there, then, in the knowledge of our predecessors which will help the Academy to meet not only the challenge of the present but also the still greater challenge of the future? More than two thousand years ago Heraclitus laid down what he believed to be one of the fundamental laws of the universe. "There is nothing permanent," he said, "except change." Certainly science has found little to disprove that assertion and much to confirm it.

Some medical men, influenced by Darwin, have tended to believe that, through the elimination of the unfit, the forces of Nature move continuously upward and onward. They see now what they had almost forgotten, that during certain periods the body politic, like the body human, may stagnate—even retrogress. The undesirable and destructive elements are in the ascendant and although change never for a moment ceases, it is not *ipso facto* to be assumed that the change is for the better. "All that is buman," said Gibbon, "must retrograde if it do not advance."

This then, I humbly submit, is the beginning of wisdom for the Academy in these perilous times. But despite the fact that half the world is in flames, we do not have to retrogress. It is our sacred duty, our inescapable destiny, to advance, eyes open, into the future, there to meet whatever challenge life shall hold.

Medicine being of the web and woof of our social life shares in all the changes and also in the anxiety with which all mankind faces the future. Forthwith, however, some of this anxiety can be dissipated in the realization that whatever else betides the world, as long as there are men on this earth, there will be illness among them and as long as men are ill they will be in need of the best care that medicine can afford them and will want that care administered to them in the best tradi-

tions in which the Art is to be practiced.

In this we have much to fortify us. In the last seventy years medicine has achieved more scientifically than it had in the rest of recorded time. More freely than ever before "the never-idle workshop of Nature" has been yielding up its secrets to man. To the successful use of the sulfonamides has been added the discovery of the most dynamic vitamin, Biotin. In the past few years the hypothesis of the atomic theory has been strengthened by the splitting of the atom. In the case of uranium the amount of dynamic energy thus released has actually been measured. We are on the threshold of solving many riddles, among which it seems safe to place such virus diseases as infantile paralysis, the common cold and the newer form of virus pneumonia.

But here we are confronted by what appears to be another universal law that behind each advance of science lurks some new and concomitant problem. No sooner does the profession feel reasonably confident that the cure of pneumonia has been found than a new, virus-type form appears. It does not respond to the new treatment. Medicine must then immediately institute new research, hopefully employing gramacidin and penicillin.

The United States is fortunate today in that many of the greatest scientists of the modern world have gathered here under the standard of liberty and will join our scientists in this basic research.

Life expectancy at birth has during the past twenty years been extended by at least ten years through the work of modern science. The problem thereby created is the treatment of the largely increased illnesses associated with old age. The development of the specialty of Geriatrics is a pressing problem wherein the Academy must forge ahead in its educational program, fitting physicians to meet this demand, else we would not uphold Browning in his plea:

"Grow old along with me— The best is yet to be!"

Physical science, however, has advanced much more rapidly than have our social sciences, and to this lag may be charged many of the problems that are facing us today. Our biological, chemical and physical discoveries have far outrun our social and economic adjustments and the war demands have completely thrown society out of gear. In no other branch of science as in medicine have its discoveries been so quickly, and at so little cost, put at the disposal of the public; but still

it is not enough. In this lies the Academy's opportunity and obligation to educate the medical profession for their proper use and the laity for proper coöperation.

The approach of the Academy to medicine has always been—and must continue to be—through the individual patient. This is, in many respects, the more difficult way. But for society as a whole it is, infinitely, the surer way.

It is also, I believe, the future way. Two recent portents will confirm us here: Lord Nuffield recently endowed for a period of ten years, the Institute of Social Medicine at Oxford—an interesting and significant event which has received too scant public notice. Let me quote the exact words of the announcement of the Institute's objectives:

"To investigate the influence of social genetic, environmental and domestic factors on the incidence of human disease and disability.

"To seek and promote measures, other than those usually employed in the practice of remedial medicine, for the protection of the individual and of the community against such forces as interfere with the full development and maintenance of man's mental and physical capacity."

In the same spirit, but with a somewhat different objective, should be mentioned the creation of the Nutrition Foundation by a group of food and other, closely related manufacturers. This foundation has assigned a fund of a million and a half dollars to support a five-year program in the application of the science of nutrition.

We have, apparently, some companionship in going out to meet this challenge. On the one hand we have a philanthropic University foundation; on the other a purely industrial foundation, both supported by large sums of money and both devoted to the application of the medical sciences to the improvement of the well-being of man.

We have an ally more precious still. Never before has the public been more interested in the scientific and the sociological aspects of medicine. No "social architect" can meet this hunger because it is not a hunger for more social theories. It is rather a hunger for established facts, truthfully correlated and interpreted in the impartial light of science. Society's ills, as the public instinctively feels, are not going to be cured by the anodyne of wishful thinking. They are beginning to see that the first step is the same as in the treatment of disease in an individual patient. We must clearly define the disorder, its symptoms and its probable causes. Then and then only may we recommend such

remedies, such changes in environment, as will remove the morbid manifestations by eliminating their causes.

It would be presumptuous for any man to pretend that, standing in the midst of the storm, he can diagnose with full accuracy the nature of society's present global difficulties, their causes and their cure. Yet the medical profession, standing on the solid base of known fact and trained, as it is, to maintain calm in the face of any disaster, will be able assuredly to make a worthwhile contribution.

The humanitarians of the last century, the Chadwicks and the Shattucks, could do no more than protest angrily against the degrading circumstances in which so many men labored and lived. But not until modern medicine revealed the microbic, the diet deficiency and other causes of disease, could their socially-righteous indignation be implemented and rendered effective. It is not enough to *feel*; it is essential also to *know*.

As long ago as the Seventeenth Century, Shakespeare could have King Lear say,

"Poor naked wretches, wheresoe'er you are,
That bide the pelting of this piteous storm,
How shall your houseless heads and unfed sides,
Your loop'd and windowed raggedness, defend you
From seasons such as these?..."

He could ask the question but there was not, at the time, a man, nor any group of men, anywhere in the world who could give answer. They simply did not know.

Today, at least, medicine can offer a clear and valid knowledge on many fronts—fronts which it is our duty to expand. To every segment of man's life, whether it be at home or in the work place, on the battle-field or in the metropolis, medicine has been and is making fundamental contributions in knowledge and in guidance. We have made vast advances on the physical front and some, but not enough, on the psychological front.

I would not add even so much as one to the thousands of definitions of Man. But on the fact that Man is above all a thinking animal, all of us would be in agreement. Part, at least, of the challenge of the future to the Academy, therefore, is that it must think more clearly and deal more thoughtfully not only with man the corporeal being, but also with man the cogitating creature.

Yet here we must be aware of a pitfall which has engulfed so many of our contemporaries. We must not be tempted into drafting a blue-print for salvation; one of those schemes which are compounded out of wishful thinking and the naive belief that given but enough enthusiasm we could—

" conspire
To grasp this sorry Scheme of Things entire,
and then
Re-mould it nearer to the Heart's Desire!"

We need rather to follow the same pattern that serves us when we deal with the ills of man. And in all this we must cleave to that wisest of all therapeutic precautions "above all—to do no harm."

It must be patent to everyone that much of our difficulty can be charged to the enormous disparity that exists between our scientific and technological advances and our social and economic evolution. In the light of what we know we are woefully backward in what we do. We must then catch up with these advances realizing that the crux of the problem is how this catching-up is to be effected.

To this problem medicine with its vast encompassments can and must make a solid contribution; for medicine can contribute its knowledge to the thinking and planning of the social architects who are ambitious to build the society of tomorrow. Today there is a vast and potent body of medical knowledge that can serve to make the world a better place to live in. For medicine, notably during the present century, has extended its sway far beyond the mere diagnosis and treatment of illness. It has gained precious knowledge about the normal operations of the human body, and, no less significantly, the normal, as well as the abnormal operations of the human mind and psyche. Today, better than at any time in the history of mankind, we know how to promote and to conserve human well-being physically, mentally and emotionally.

We call in witness of this the enormous strides that have been made in the specialties of nutrition and psychiatry. In place of those truly fantastic speculations about man and his social relations, initiated by Rousseau and since elaborated by many different schools of thought, medicine today offers a much clearer and infinitely more valid body of knowledge on the psychological mainsprings of human behavior. It is no accident that in the world strife of today this knowledge has been enlisted in the propaganda battle between the warring nations. It may seem that we have wandered far from the title of our paper, The Academy Meets the Challenge of the Future, but in substance we have not. For in all those "affairs of today and tomorrow" which have been described, those which are in substance "the challenge of the future," the Academy has an important role to play. For the "social architects" will not entirely and on their own initiative come begging for the guidance and instruction that medicine affords.

It is, therefore, necessary that medicine should exercise its influence actively, not with the aggression of a "pressure group" but rather with that positiveness which is warranted by its knowledge. This is no new function, nor yet a novel role for the Academy. For more than three decades the Academy has through its Committee on Public Health Relations, through its Committee on Medical Education and more lately through its Committee on Medical Information, played an ever-increasing role in dealing with problems of public policy.

We are resolved to continue and to intensify these activities. More specifically, though without elaborating the details too largely, we at the Academy propose to institute in the immediate future, through our standing committees and through such special committees as will be required, careful and thorough-going studies of the trends and the indicated future developments in medicine and in communal and public health. We propose to scrutinize carefully the proposals and plans for the post-war world that are formulated by responsible and authoritative agencies. We intend to do this so that we may be fully informed and in a position to contribute effectively to such services as we may be ultimately called on to render. It is likewise our intention to devote thought and consideration to the more immediate problems that confront us in the medical world, to those that stem from the rapid changes that are taking place in the undergraduate education of the physician, from the reorganization and the administrative changes of the voluntary hospitals that are dictated by the curtailment of financial support, from the withdrawal of so many physicians from civil practice to military service, from the relocations of populations, and we must also devote our attention to those various health problems that issue from food and fuel rationing, from the intensification of our industrial efforts, and from the increased participation of women in war work.

Now once again, with pressing urgency, demands are made upon us. We are meeting—we must continue to meet—these demands. Civilian Defense Units must be kept up to date. Catastrophe Teams must be kept continually on the alert. Plans must be perfected for the emotional and physical rehabilitation of men returning from the war. The Refresher Courses must be given with increasing intensity. Yes, many a specialist must now reverse his steps and, with eagerness, set out to become the improved counterpart of the Horse and Buggy Doctor.

If only one-half of the former number of active doctors remains in New York to look after the entire problem of public and private health, then men over forty must renew their youth in vastly-increased service to the community.

The Academy must add to its responsibilities without relinquishing a single one of its activities in the State or Nation.

These, then, are the challenges of the future. These, we must go forth to meet. The fellows of this great institution must be not only defenders of the noble traditions which they have inherited, they must also strike out fearlessly into the unknown. We must purpose to be more than guardians. We must resolve—

"To follow knowledge like a sinking star Beyond the utmost bound of human thought."

I would not have you believe that ours is an easy task. Encompassed about on all sides by destruction, by change and by manifold anxieties we must nevertheless continue—

"To strive, to seek, to find, and not to yield."

We must so live and so achieve that, fifty years hence, members of this august body, looking back, will say, "Those were great years in the Academy's history. In troublous times, they held the torch aloft."

When others falter, or lose the way, the Academy must—the Academy will—point the way and define the path which the medical profession should follow. Physicians, true to their calling, will be inspired by the difficulties and burdens that await them and with one accord give unsparingly of themselves. For, as Hippocrates truly said, "Wherever the Art of Medicine is loved, there also is love of humanity."

We live in a changing world. We live in a world at war. We must realize now, more than ever before, that—

And we must take the current when it serves.

"On such a full sea are we now afloat.

Or lose our venture."